

## DE-RINGING FILTER

### ABSTRACT OF THE INVENTION

An image de-ringing filter system and method are provided.

- 5 The method comprises: accepting image pixels; collecting data from a first group of pixels neighboring a test pixel; in response to the first group data, deciding if the test pixel includes image ringing artifacts; collecting data from a second group of pixels neighboring the test pixel; in response to the second group data, generating a filtered value (FV); and, replacing
- 10 the test pixel actual value with FV. Typically, collecting data from the first and second group of pixels includes the performance of a mathematical operation. For example, a matrix may be defined for the multiplication of the first group of pixels. Values of pixels on a first side of the coordinate axis may be subtracted from pixels on a second side of
- 15 the coordinate axis, opposite of the first side. Then, the difference is compared to a threshold.